

1. (Currently Amended) A method for processing application program data for storage and retrieval employed by a processing device, comprising the steps of:

designating a logical dataset encompassing a plurality of physical storage datasets, each of said plurality of physical storage datasets having a predetermined storage capacity

storing an identifier identifying an end storage address of a first physical storage dataset of said logical dataset indicating end of said predetermined storage capacity of said first physical storage dataset;

sequentially storing data in said logical dataset;

monitoring said sequential storage of data in said logical dataset to determine an occurrence of data storage at a location identified by said end storage address of said first physical storage dataset; and

automatically continuing said sequential storage of data in a second physical storage dataset of said logical dataset starting at an address automatically determined in response to predetermined instruction and independent of subsequent to said end storage address.

2. (Previously Presented) The method of claim 1, further comprising:

maintaining a plurality of identifiers in a repository identifying each end storage address of each physical storage dataset of said plurality of physical storage datasets.

3. (Previously Presented) The method of claim 1, further comprising:

sequentially storing data in said first and second physical storage datasets.

4. (Previously Presented) The method of claim 1, further comprising:

monitoring the amount of storage used by the logical dataset to enable allocation of physical memory device resources to the logical dataset.

5. (Previously Presented) The method of claim 1 wherein said step of

continuing said sequential storage of data comprises

extending the storage of data beyond a physical storage boundary of said first physical storage dataset in a subsequent physical storage dataset of said logical dataset starting at an address subsequent to said end storage address.

6. (Currently Amended) A method for processing application program data for storage and retrieval employed by a processing device, comprising the steps of:

designating a logical dataset encompassing a plurality of physical storage datasets, each of said plurality of physical storage datasets having a predetermined storage capacity;

maintaining an identifier identifying an end storage address of a first physical storage dataset of said logical dataset indicating end of said predetermined storage capacity of said first physical storage dataset;

sequentially storing data in said logical dataset;

monitoring said sequential storage of data in said logical dataset to determine an occurrence of data storage at a location identified by said end storage address of said first physical storage dataset; and

automatically continuing said sequential storage of data in a second physical storage dataset of said logical dataset starting at an address automatically determined in response to predetermined instruction and independent of subsequent to said end storage address.

7. (Original) The method according to claim 6, wherein

said step of monitoring said sequential storage of data in said logical dataset includes the step of maintaining an identifier of storage capacity used in response to storage of data in said logical dataset.

8. (Original) The method according to claim 7, wherein

said determination of said occurrence of data storage at said location identified by said end storage address of said first physical storage dataset is performed using said identifier of storage capacity used and said predetermined storage capacity of said first physical storage dataset.

9. (Original) The method according to claim 6, wherein

said end storage address of said first physical storage dataset of said logical dataset comprises a relative address.

10. (Original) The method according to claim 6, wherein

at least one physical storage dataset comprises an IBM virtual storage access method entry sequenced dataset (VSAM ESDS).

11. (Original) The method according to claim 6, wherein

said identifier identifying an end storage address comprises a pointer supporting identifying address locations of particular records in said logical dataset.

12. (Currently Amended) A system for processing data for storage and retrieval, comprising:

a processor adapted to:

designate a logical dataset encompassing a plurality of physical storage datasets, each of said plurality of physical storage datasets having predetermined storage capacities; and

a dataset processor adapted to:

maintain an identifier identifying an end storage address of a first physical storage dataset of said logical dataset indicating end of said predetermined storage capacity of said first physical storage dataset;

sequentially store data in said logical dataset;

monitor said sequential storage of data in said logical dataset to determine an occurrence of data storage at a location identified by said end storage address of said first physical storage dataset; and

automatically continue said sequential storage of data in a second physical storage dataset of said logical dataset starting at an address automatically determined in response to predetermined instruction and independent of subsequent to said end storage address.

13. (Previously Presented) The system of claim 12, wherein

said processor is adaptable to maintain an identifier of storage capacity used in response to storage of data in said logical dataset.

14. (Original) The system of claim 12, wherein

said dataset processor is adaptable to determine said occurrence of data storage at said location identified by said end storage address of said first physical storage dataset by using an identifier of storage capacity used and said predetermined storage capacity of said first physical storage dataset.

15. (Original) The system of claim 12, wherein

said end storage address of said first physical storage dataset of said logical dataset comprises a relative address.

16. (Original) The system of claim 12, wherein

said at least one physical storage dataset comprises an IBM virtual storage access method entry sequenced dataset (VSAM ESDS).

17. (Original) The system of claim 12, wherein

said identifier identifying an end storage address comprises a pointer supporting identifying address locations of particular records in said logical dataset.

18. (Currently Amended) A machine-readable media comprising instructions for a plurality of activities comprising:

designating a logical dataset encompassing a plurality of physical storage datasets, each of said plurality of physical storage datasets having predetermined storage capacities;

maintaining an identifier identifying an end storage address of a first physical storage dataset of said logical dataset indicating end of said predetermined storage capacity of said first physical storage dataset;

sequentially storing data in said logical dataset;

monitoring said sequential storage of data in said logical dataset to determine an occurrence of data storage at a location identified by said end storage address of said first physical storage dataset; and

automatically continuing said sequential storage of data in a second physical storage dataset of said logical dataset starting at an address automatically determined in response to predetermined instruction and independent of subsequent to said end storage address.

19. (Original) The machine readable medium of claim 18, wherein a physical storage dataset comprises an IBM virtual storage access method entry sequenced dataset (VSAM ESDS).

20. (Original) The machine readable medium of claim 18, wherein said end storage address of said first physical storage dataset of said logical dataset comprises a relative address.